



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

J/N

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,110	09/12/2003	Michael A. Rothman	042390.P17245	9097
8791	7590	02/09/2006	EXAMINER	
BLAKELY SOKOLOFF TAYLOR & ZAFMAN 12400 WILSHIRE BOULEVARD SEVENTH FLOOR LOS ANGELES, CA 90025-1030			SURYAWANSI, SURESH	
			ART UNIT	PAPER NUMBER
			2115	

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/662,110	ROTHMAN ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Suresh K. Suryawanshi	2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 12 September 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-50 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 12 September 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

1. Claims 1-50 are presented for examination.

### ***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 9-10, 22-24, 29-30, 42 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Treu (US Patent 5,245,615).

3. As per claims 1 and 22, Treu discloses

registering an event logging handler with a plurality of event handlers in a pre-boot environment [Fig. 4 and 5; col. 7, lines 38-52; error logging];

storing a plurality of event data in a memory-based buffer, by the event logging handler, as events occur [Fig. 4 and 5; col. 7, lines 38-52; storing into a BIOS buffer];

retrieving the plurality of event data from the memory-based buffer [Fig. 4 and 5; col. 7, lines 38-52; retrieve from the BIOS buffer]; and

storing the retrieved plurality of event data in a memory location accessible by an operating system, the storing being performed prior to launching of the operating system [Fig. 4 and 5; col. 7, lines 38-52; moving the data from the BIOS buffer into error log; col. 4, line 66 -- col. 5, line 8; error log is accessible by the OS].

4. As per claim 42, Treu discloses

a processor, wherein the processor is operatively coupled with a non-volatile pre-boot memory store and a random access memory (RAM) [Fig. 1; a processor 12 and NVRAM 30];

a memory for storing event data in a pre-boot environment operatively coupled with the processor [Fig. 1; NVRAM 30];

a memory-based buffer for shadowing pre-boot environment event data, the memory-based buffer being accessible by an operating system agent, and operatively coupled to the processor [Fig. 3; error log 88]; and

an event logging handler running on the processor during pre-boot, the event logging handler for registering the pre-boot event data to the memory-based buffer [Fig. 4 and 5; col. 7, lines 38-52; error logging].

5. As per claims 2 and 23, Treu discloses that the data stored in the memory-based buffer shadows event data stored in a proprietary memory, wherein the proprietary memory is accessible at pre-boot, but not by the operating system [Fig. 3; col. 4, lines 50-54; VPD and the VPD is accessible by the BIOS but not accessible by the operating system].

6. As per claim 3, Treu discloses that the proprietary memory is a non-volatile memory [Fig. 3; col. 4, lines 50-54].

7. As per claims 4 and 24, Treu discloses that the memory location accessible by the operating system is identified by a globally unique identifier (GUID) pointer [inherent to the system as a unique identifier will be needed to access the memory location].

8. As per claims 9 and 29, Treu discloses that event data comprises: progress data, status data, error logging information, and general system information [col. 6, lines 35-55].

9. As per claims 10 and 30, Treu discloses accessing the memory-based buffer by an operating system agent [Fig. 3; error log is accessible by the operating system].

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 5-8, 25-28, 43-45 and 48-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Treu (US Patent 5,245,615) in view of Applicant Admitted Prior Art (AAPA).

12. As per claims 5-8, 25-28 and 44-45, Treu discloses the invention substantially. Treu does not disclose about an extensible firmware interface (EFI) and an advanced configuration power interface (ACPI). However, AAPA clearly discloses that EFI and ACPI are well known in the art [page 8, lines 5-8]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to introduce an EFI table and/or ACPI table because these memory locations are accessible by the operating system.

13. As per claims 43 and 48, AAPA discloses that the pre-boot memory store is flash RAM storing a basic input/output system (BIOS) [Fig. 2 and 3].

14. As per claim 49, Treu discloses that the memory for storing event data reside on the flash RAM comprising the non-volatile pre-boot memory store [Fig. 3; NVRAM].

15. As per claim 50, AAPA discloses that the memory for storing event data is a firmware hub comprising a BIOS and vital product data (VPD) [para 0018-0020].

16. Claims 11-12, 15-16, 19, 31-32, 35-36, 39 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Treu (US Patent 5,245,615) in view of Morris et al (US Patent 6,785,893; hereinafter Morris).

17. As per claims 15 and 35, Treu discloses

retrieving event data from a memory-based buffer [Fig. 3; error log], by an operating system agent during runtime [col. 4, line 66 -- col. 5, line 8; error log is accessible by the OS], the memory-based buffer being generated in a pre-boot environment by an event logging handler [Fig. 4 and 5; col. 7, lines 38-52; moving the data from the BIOS buffer into error log], wherein the memory-based buffer resides in a reserved portion of system memory known to both the pre-boot environment and the runtime environment [Fig. 3; error log is accessible by the pre-boot environment and the runtime environment (the operating system)].

Treu does not expressly disclose about displaying the error log during runtime, by the operating system. But Treu clearly discloses that the error log is accessible by the operating system. However, Morris clearly discloses that an accessible event/error log can be displayed under a running operating system [col. 2, lines 44-49; col. 3, lines 16-41; col. 18, line 52 -- col.

19, line 3; col. 19, line 48 -- col. 20, line 29]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are directed for logging event/error log and making the logged event/error log be accessible by an operating system. Moreover, the method of displaying the error log under runtime environment will clearly be useful because a normal user will be able to look into the log in a user-friendly manner.

18. As per claims 11 and 31, Morris discloses performing an action, by the operating system agent, in response to data accessed from the memory-based buffer [displaying the data; col. 2, lines 44-49; col. 3, lines 16-41; col. 14, lines 8-13; col. 18, line 52 -- col. 19, line 3; col. 19, line 48 -- col. 20, line 29].

19. As per claims 12 and 32, Morris discloses that the action performed is selected from the group of actions consisting of generating an alert, displaying event data, reporting event data, saving event data, transmitting event data, and transmitting a notification to a user [col. 14, lines 8-13].

20. As per claims 16 and 36, Treu discloses that the memory-based buffer is identified by a globally unique identifier (GUID) [inherent to the system as a unique identifier will be needed to access the memory location].

21. As per claims 19 and 39, Morris discloses displaying the even data [displaying the data; col. 2, lines 44-49; col. 3, lines 16-41; col. 14, lines 8-13; col. 18, line 52 -- col. 19, line 3; col. 19, line 48 -- col. 20, line 29].

22. As per claim 46, Morris discloses displaying the event data [displaying the data; col. 2, lines 44-49; col. 3, lines 16-41; col. 14, lines 8-13; col. 18, line 52 -- col. 19, line 3; col. 19, line 48 -- col. 20, line 29].

23. Claims 17-18 and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Treu (US Patent 5,245,615), Morris et al (US Patent 6,785,893; hereinafter Morris) and further in view of Applicant Admitted Prior Art (AAPA).

24. As per claims 17-18 and 37-38, Treu and Morris disclose the invention substantially. Treu and Morris do not disclose about an extensible firmware interface (EFI) and an advanced configuration power interface (ACPI). However, AAPA clearly discloses that EFI and ACPI are well known in the art [page 8, lines 5-8]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to introduce an EFI table and/or ACPI table because these memory locations are accessible by the operating system.

25. Claims 13-14, 20-21, 33-34, 40-41 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Treu (US Patent 5,245,615), Morris et al (US Patent 6,785,893; hereinafter Morris) and further in view of Kimoto et al (US Patent Application Publication 2002/0184366; hereinafter Kimoto).

26. As per claims 13, 20-21, 33, 40-41 and 47, Treu and Morris disclose the invention substantially. Treu and Morris do not disclose using extensible markup language (XML) to display the event/error data. But a routineer in the art would know that XML is well known to use to display any kind of information/data as a webpage by utilizing a web browser. However, Kimoto expressly discloses using XML for viewing log data [para 0022-0023 and 0088-0089]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as they are directed towards logging and viewing event/error data of a system. Moreover, by utilizing the XML, once clearly provides a system independent viewing method. The system just has to have a web browser to view the data.

27. As per claims 14 and 34, Kimoto discloses that the displaying occurs during runtime [para 0022-0023 and 0088-0089].

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suresh K. Suryawanshi whose telephone number is 571-272-3668. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sk  
January 31, 2006



THOMAS C. LEE  
PATENT  
EXAMINER